

REMARKS

In response to the anticipation-type rejection of the claims over Battersby, the Applicant has amended the independent claims and submits that all of the claims are now in condition for allowance.

Independent claims 1 and 19 have been amended to specifically recite that the primary sealant is disposed entirely across the channel and that it extends from the first glazing sheet to the second glazing sheet. The secondary sealant is then placed over the primary sealant resulting in a spacer arrangement that has three moisture-impervious layers - the spacer material, the primary sealant, and the secondary sealant. The Battersby reference does not contemplate this arrangement disclosing and teaching that only two of its sealants are disposed entirely across the sealant channel. The Battersby arrangement is thus more susceptible to leaking and sealant failure.

The Applicant has amended claim 26 to specifically recite that an adhesive is used to connect the spacer element to the glazing sheets before the primary and secondary sealant are applied to the sealant channel. The Battersby reference uses the sealants to act as the adhesive agent requiring the glazing sheets to be clamped to the spacer as discussed Col. 4, lines 65-66 and Col. 5, lines 35-36. This type of arrangement requires extra time to assembly. A drawback with the finished assembly is that the sealant must accommodate all of the pumping action of the glass that occurs in response to temperature and pressure changes. Such accommodation can weaken the ability of the sealant to keep moisture out of the insulating chamber of the window. In contrast, the invention recited in claim 26 requires an adhesive connection between the spacer and glazing sheets. The adhesive connection avoids the clamping step of Battersby and allows the spacer to accommodate the pumping action of the glazing unit. This is especially relevant when the spacer is a flexible foam-bodied spacer as recited in claim 30. The Applicant thus submits that claim 26 is in condition for allowance.

The Applicant further submits that the dependent claims are independently patentable in addition to being in condition for allowance based on the allowability of the independent claims.

In view of the foregoing, the Applicant respectfully requests reconsideration of the claims and most earnestly solicits the issuance of a formal notice of allowability for the claims. If any issues remain after this amendment, the undersigned attorney would welcome a telephone call.

Respectfully submitted at Canton, Ohio this 24th day of February, 2003.

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Marked-up version of claims

1. (Twice amended) A method for fabricating an insulating glazing unit comprising the steps of:

providing a first glazing sheet having a first perimeter;

connecting a spacer to the first glazing sheet at a location spaced inwardly from the first perimeter;

providing a second glazing sheet having a second perimeter;

connecting the second glazing sheet to the spacer such that the spacer is disposed at a location inward from the second perimeter whereby an outwardly-facing channel is formed between the glazing sheets and the spacer and an insulating chamber is formed inward of the spacer between the glazing sheets;

hermetically sealing the insulating chamber by applying a primary sealant into the outwardly-facing channel; the primary sealant being applied after then outwardly-facing channel is formed; the primary sealant extending entirely across the channel from the first glazing sheet to the second glazing sheet; and

applying a secondary sealant into the outwardly-facing channel after at least a portion of the primary sealant is applied.

Please cancel claims 4 and 7 without prejudice or disclaimer.

19. (Twice amended) A method for sealing an insulating glazing unit having first and second glazing sheets spaced apart by a spacer disposed inward of the perimeters of the glazing sheets to form an outwardly-facing channel; the insulating glazing unit having an insulating chamber disposed inward of the spacer between the glazing sheets; the method comprising the steps of:

hermetically sealing the insulating chamber by applying a primary sealant [to at least the corners of] entirely across the channel disposed adjacent the spacer and glazing sheets; the primary sealant being applied after the outwardly-facing

channel is formed; the primary sealant forming a continuous seal that extends from the first glazing sheet to the other glazing sheet; and

applying a secondary sealant in the outwardly-facing channel over the primary sealant; the secondary sealant being different from the primary sealant; the secondary sealant being disposed entirely across the channel and forming a continuous seal that extends from the first glazing sheet to the other glazing sheet.

26. (Twice amended) A method of forming an insulating glazing unit comprising the steps of:

providing a first glazing sheet having a first perimeter;

connecting a [metal] spacer to the first glazing sheet with an adhesive; the spaced being located at a location spaced inwardly from the first perimeter;

providing a second glazing sheet having a second perimeter;

connecting the second glazing sheet to the spacer with an adhesive such that the spacer is disposed at a location inwardly from the second perimeter whereby an outwardly-facing channel is formed between the glazing sheets and the spacer and an insulating chamber is formed inwardly of the spacer between the glazing sheets;

applying a primary sealant into the outwardly-facing channel to hermetically seal the insulating chamber; the primary sealant being applied after the outwardly-facing channel is formed; and

applying a secondary sealant over the primary sealant.

27. (Once amended) The method of claim 26, wherein the [metal] spacer is free of sealant when [it] the spacer is connected to the first and second glazing sheets.